

A service of the U.S. National Library of Medicine
[\[Sign In\]](#) [\[Register\]](#)

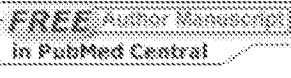
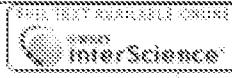
All Databases PubMed Nucleotide Protein Genome Structure
 OMIM PMC Journals Books

Search for

Display Show Sort By Send to

All: 1

1: Mol Reprod Dev. 2006 Jun;73(6):767-73.



Links

Calpain 11 is unique to mouse spermatogenic cells.

Ben-Aharon I, Brown PR, Shalgi R, Eddy EM.

Department of Cell and Developmental Biology, Sackler School of Medicine, Tel-Aviv University, Tel-Aviv, Israel.

The calpains are a family of calcium-dependent thiol proteases involved in intracellular processing of proteins. They occur as heterodimers containing one of various large subunits and a common small subunit. Some of the large subunits are expressed ubiquitously and others are expressed in a restricted set of tissues. We have cloned the cDNA for mouse calpain 11 and demonstrated that it is expressed specifically in the mouse testis. The mRNA begins to accumulate in the testis between days 14 and 16 after birth, corresponding to the period of pachytene spermatocyte development. The protein is detected by day 18 after birth, during mid to late pachytene spermatocyte development, and is present in the acrosomal region of spermatozoa from the cauda epididymis. The expression of calpain 11 during spermatogenesis and its localization in spermatozoa suggest that it is involved in regulating calcium-dependent signal transduction events during meiosis and sperm functional processes.

Related Links

The expression of calpain 1 and calpain 2 in spermatogenic cells and spermatozoa [PubMed]

The unique catalytic subunit of sperm cAMP-dependent protein kinase is the product of an alternative Calpha mRNA expressed specifically in spermatogenic cells [PubMed]

Expression of human, mouse, and rat m-calpains in Escherichia coli and in murine fibroblasts [PubMed]

Cloning and characterization of a novel gene SRG-L expressed in late stages of chicken spermatogenesis [PubMed]

Molecular cloning of a novel mouse testis-specific spermatogenic cell apoptosis inhibitor gene mTSARG7 as

PMID: 16541461 [PubMed - indexed for MEDLINE]

PMCID: PMC1855627

china Biopublication (2005)

» See all Related Articles...

Display

Show

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

Department of Health & Human Services

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)